

Fig. 3

Fig. 4

$$(15)$$

$$(16)$$

$$(17)$$

$$(18)$$

$$(18)$$

$$(15)$$

$$(15)$$

$$(15)$$

$$(15)$$

$$(15)$$

$$(15)$$

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$$(18)$$

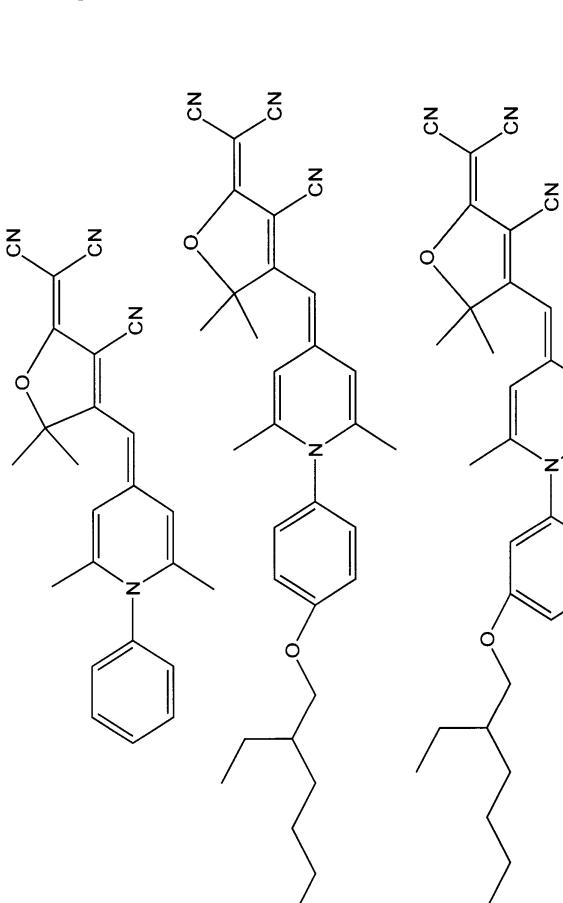
$$(18)$$

Fig. 5

Fig. 6

Fig. 7

Fig. 9



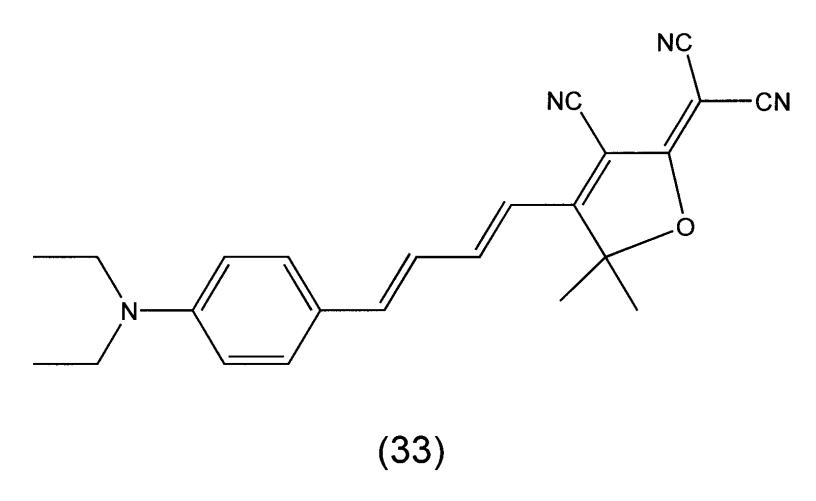


Fig. 11

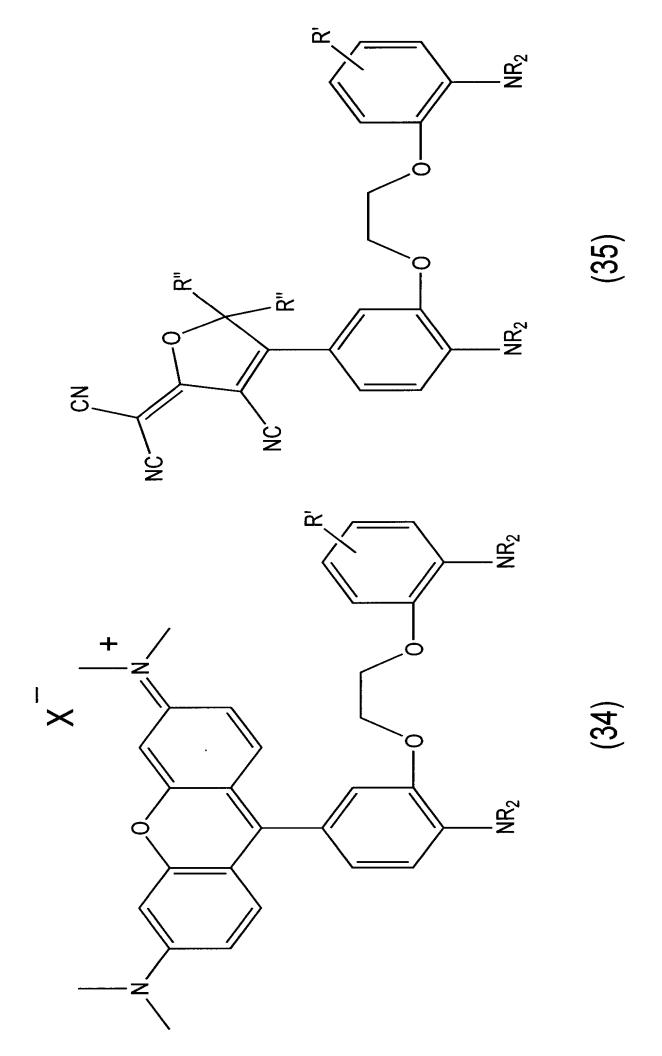


Fig. 13

Fig. 14

$$F \longrightarrow MgBr \longrightarrow Mg, THF \\ F \longrightarrow Br$$

$$OH \longrightarrow OTMS \qquad TMSCN, \\ n-BuLi, THF \bigcirc CF_3 \qquad CH_3$$

$$R_1R_2NH, \qquad DMF, \\ DMF, \\ PTSA \longrightarrow NC \longrightarrow NC$$

$$MgBr \longrightarrow Mg, THF \\ TMSCN, \\ n-BuLi, THF \bigcirc CF_3 \\ CH_3 \longrightarrow CH_3$$

$$NC \longrightarrow CR$$

$$NC \longrightarrow NC$$

$$NC \longrightarrow NC$$

$$NC \longrightarrow CN$$

Entry 14: DCDHF-C6M-CF3

19a:  $R_1 = R_2 = ethyl$ Entry 15: DCDHF-6-CF3 19b:  $R_1 = R_2 = n-hexyl$ 

Entry 16: DCDHF-2-CF3

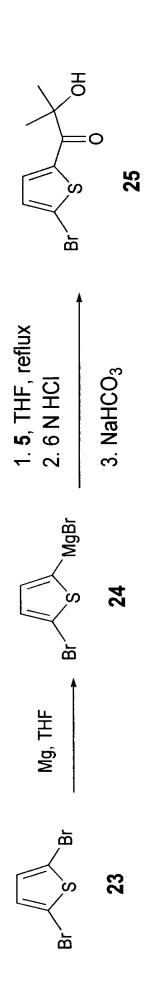
19c:  $R_1 = R_2 = hexamethylene$ 

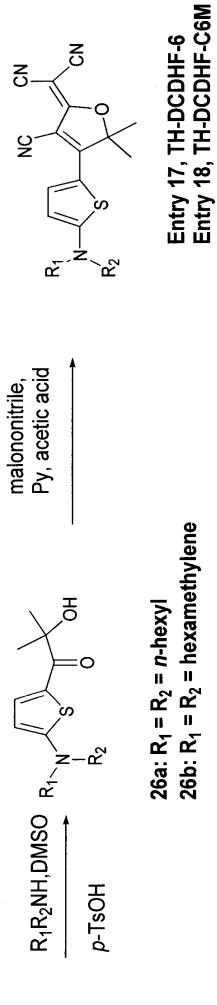
Fig. 15

Structures of the products

## Benzaldehyde used

Fig. 16





S

30a: R = -C<sub>6</sub>F<sub>13</sub> 30b: R = -C<sub>6</sub>H<sub>13</sub> 30c: R = -COOC<sub>12</sub>H<sub>25</sub>

7

Entry 27: PFP-DDCDHF, R = -C<sub>6</sub>F<sub>13</sub>
Entry 28: HP-DDCDHF, R = -C<sub>6</sub>H<sub>13</sub>
Entry 29: DOCP-DDCDHF, R = -COOC<sub>12</sub>H<sub>25</sub>

## Fig. 19

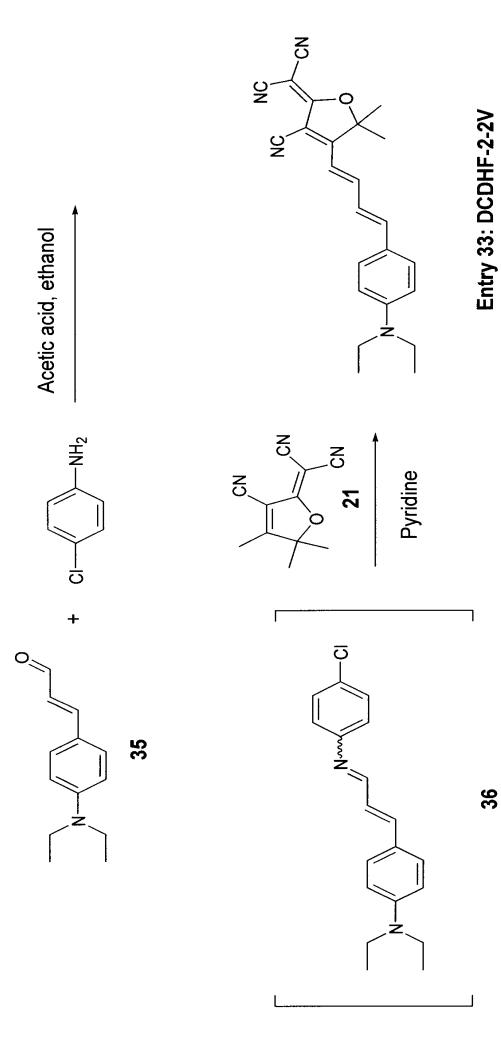
33c: R = H

**Entry 30: P-DDCDHF** 

Entry 31: 2EHO-DDCDHF

Entry 32: M2EHO-DDCDHF

## Fig. 20



$$\begin{array}{c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$